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APPLICANT: IDEMITSU KOSAN CO LTD;

INVENTOR: KAWAMURA HISAYUKI;

INT.CL.

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TITLE

: ORGANIC ELECTROLUMINESCENCE

ELEMENT

Ar⁴ - N - Ar⁸ - N - Ar⁵
Ar⁸ Ar⁷

Marata

ABSTRACT: PURPOSE: To produce the subject element having long life to cause little variation of the luminescent color after driving for a long period, exhibiting high luminescent efficiency and suitable for a display for information industry equipments, etc., by adding a specific amount of a specific fluorescent dopant to a recombination area and a light-emitting area.

> CONSTITUTION: This organic electroluminescence element is provided with an organic compound layer having a recombination area to cause the recombination of holes and electrons and a light-emitting area to emit light in response to the recombination and a pair of electrodes sandwiching the organic compound layer. The recombination area or the light-emitting area contains 0.1-8wt.% of a fluorescent dopant consisting of a compound of

formula I (Ar1 to Ar3 are each a 1-10C alkyl, a 6-30C aryl or a

heterocyclic group and at least one of the groups is a ≥12C condensed polycyclic

hydrocarbon group) or a compound of formula II (Ar4 to Ar7 are

each a 1-10C alkyl, a 6-30C aryl or a heterocyclic group; Ar8 is a 6-30C

arylene or a bivalent heterocyclic group; at least one of Ar4 to Ar8

is a ≥12C condensed polycyclic hydrocarbon group).

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